

Empowering residential care home staff to manage patients with skin tears: reducing the need for unscheduled district nursing visits

KEY WORDS

- ▶ Care home
- ▶ District nurses
- ▶ Older people
- ▶ Skin tears
- ▶ Wounds

Abstract: Skin tears are traumatic acute wounds that continue to increase with the aging population and the associated physiological skin changes. They are known to cause significant pain, affect quality of life of patients and lead to large amounts of unscheduled and scheduled visits for the district nurses, as well as inappropriate call outs for the paramedics. These type of wounds occur mainly on the arms and legs, they are both preventable and respond well to early intervention. South Warwickshire Foundation Trust TVN's started a three month project, where residential homes carers would be taught how to prevent and manage skin tears, only referring to the district nurses if the wound developed complications. Documentation including care plans and a skin tear first aid box were provided to each home. The project resulted in 93% of all skin tears managed from injury to healing by the residential home. Improving the resident's quality of life, empowering residential home staff, reducing unscheduled and scheduled referrals into the district nurses and callout for paramedics. The project is now being rolled out to all care homes across South Warwickshire Foundation Trust.

Skin tears are one of the most common skin complications in older people (Lichterfeld et al, 2015) owing to the physiological changes that occur in the skin due to aging (Stephen-Haynes and Carville, 2011). Physical transformations in the skins composition (Baranoski and Ayello, 2004; Voegeli, 2007) predispose it to damage from influences, such as moisture, friction and trauma (Stephen-Haynes and Carville, 2011). Furthermore, age-related comorbidities including malnutrition, dehydration and reduced mobility (Gilmore et al, 1995; Horn et al, 2004; Keevil and Kimpton, 2012) contribute towards fragile skin that risks developing into a chronic non-healing wound (LeBlanc et al, 2018). The pain associated with the lived experience of a skin tear (LeBlanc et al, 2013) and the subsequent increased risk of morbidity and mortality (Stephen-Haynes and Carville, 2011) profoundly impacts patient-related quality of life.

The main causes of skin tears are mechanical trauma (often from wheelchair injuries), removal of adhesive tapes or dressings, transfers and falls, though in some cases no apparent cause is found (Clothier, 2014). The potential impact of skin tears

for elderly people in the residential setting is evident and there is strong evidence to suggest that skin tears occur more frequently than pressure ulcers (Carville et al, 2014; LeBlanc et al, 2016). In the absence of any definitive evidence demonstrating the prevalence and incidence rates of skin tears in the UK in the community setting, prevalence rates for skin tears internationally are estimated at between 4.5–19.5% in all age groups (Carville and Lewin, 1998; LeBlanc et al, 2008). Skin tears are a common problem in healthcare worldwide, with 1.5 million elderly residents in care home institutions in the US experiencing them per year (Baranoski, 2005). Similarly, in Australia, skin tears are one of the most commonly reported types of wound (Government of Western Australia Department of Health, 2009). Skin tears are often underreported and misdiagnosed in clinical practice and these factors have influenced the updated International Skin Tear Advisory Panel (ISTAP) definition of a skin tear to include a traumatic wound caused by mechanical forces, including removal of adhesives (Le Blanc et al, 2018). Severity

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may vary by depth (not extending through the subcutaneous layer), distinguishing them from other types of wound by their complex aetiology and causative nature (Le Blanc et al, 2018).

Skin tears are largely avoidable and under reported. Idensohn et al (2019) acknowledge that education on skin tears should form part of a multidisciplinary approach to wound management centred around the maintenance of skin integrity and the ability to recognise the signs and symptoms of at-risk skin to minimise potential wound complications. Providing health professions with this knowledge can help support strategies for minimising their development and averting an escalation to secondary care for specialist treatment, which is often associated with increased financial resources attributed to inpatient treatment (LeBlanc et al, 2018).

Disparities in care practices often lead to poor assessments resulting in incorrect diagnosis and poor documentation, inappropriate treatment pathways and an increased risk of patients developing complex hard-to-heal wounds in need of urgent treatment. The importance of holistic wound assessments, which incorporate the characteristics of the wound itself, as well as the health of the patient, have been documented in the literature as one of the most effective strategies in the prevention of chronic wounds and the planning of appropriate treatments reducing the risk of further complications (Le Blanc, 2018).

Furthermore, incorrect diagnoses can often require the assistance of the ambulance service for urgent treatment, which is associated with Personal Social Services Research Unit costs estimated to be £258 per patient visit (PSSRU, 2019).

Here we present the findings of an educational intervention to support residential care home staff in the assessment, treatment and management of residents with skin tears. The aim was that by implementing this project residential care staff would feel confident to manage skin tears within the residential care setting, helping to reduce the demand on district nursing teams by only referring to specialist treatment when required.

Local context

District nursing teams reported they were experiencing increased numbers of unscheduled visits in residential care homes to residents who

had sustained skin tears from falls or knocks to shins and arms. Often dressings were applied, however, they were inappropriate for the wound or they had no dressing in place, which led to compromised healing and made skin flaps non-viable. In addition to this if a resident sustained a skin tear out of hours care home staff would call an ambulance to come and assess and treat the resident. It was felt that this whole process could be managed in a way that would improve patient outcomes, empower care staff and reduce calls to emergency services, while also releasing capacity for the district nursing teams.

Aims

The main aims for this pilot project were:

- ▶ To investigate the effect of a skin tears education programme alongside the introduction of skin tears first aid boxes on treatment and management of skin tears in the residential care setting
- ▶ To understand if the programme would lead to a reduction in unnecessary calls to district nursing teams (and emergency services)
- ▶ To understand if educating staff on how to manage skin tears has a positive impact on patient outcomes
- ▶ To identify if implementing an educational programme for care home staff increases their confidence and ability to totally manage residents with skin tears from wound onset to healing, unless complications occur.

METHODS

Design

The project involved the implementation of an educational training programme delivered to residential care staff teams which consisted of a two face-to-face sessions. The education sessions were supplemented by the provision of skin tear first aid boxes in each residential home. The boxes contained a range of sizes of dressings featuring a Technology lipido-colloid (TLC) healing matrix in line with ISTAP recommendations (LeBlanc et al, 2018), gloves and saline. A skin tears care plan form was designed (*Figure 1*) to support information and communication regarding the care provided.

Study details

The training was delivered first and then the pilot

Residential Home Name.....
 Signature of nurse/carer Printed Name.....







Name:	Skin tear location:	Date:	NHS Number:
D.O.B:			
Action Plan		Rationale	
Explain plan to patient/family Wash hands thoroughly and open sterile dressing pack put on apron and gloves.		Reduce the risk of Infection	
Ensure bleeding is under control first by applying gentle pressure using moist gauze. If bleeding does not stop after 10 minutes seek advice form the district nurses.		Stop bleeding	
If skin flap has dried out apply saline soaked gauze – leave for 10 mins, then remove and continue.		To rehydrate the skin flap and allow the skin to be re-applied over the wound	
Try to lay the skin back over the wound as soon after the injury has occurred, with a dampened gloved finger, or moistened gauze which is in the sterile dressing pack in the skin tear box.		Increase the chances of the skin flap still being viable	
Clean the wound with saline provided in skin tear box. Apply the dressing from the skin tear box - the absorbent layer in the middle of the dressing must be larger than the skin flap.		This will hold the skin flap in place over the wound and promote healing	
DRESSING TO STAY IN PLACE for 5 days — if skin flap can be placed over the whole of the wound or if slight loss of skin- see pictures below		Promote wound healing, reduce the risk of Infection and prevent further skin trauma	
  <p>Type 1 no skin loss Type 2 partial flap loss</p>			
If signs of increasing redness blood or leaking from the wound, review wound and refer to DN.			
Type 3 leave on for 3 days — if no skin flap able to be pulled over wound			
			
Change dressing, if signs of increasing redness, blood or increased leaking from the wound, review wound and refer to DN.			
Mark the dressing with an arrow/ demonstrating direction of removal/ and date to be changed, as per photo below		Not to disturb the skin flap or peel it back the wrong way	
			
Change dressing, if signs of increasing redness, blood or increased leaking from the wound, review wound and refer to DN.			
REMOVAL. When removing the dressing it may be appropriate to irrigate under the dressing first, to aid removal. Remove the dressing in the direction of the arrow on the dressing.		To prevent further skin trauma	
If the wound continues to improve form the previous dressing change there is no need to refer to DN's.		Date referred to DN	
If there are any signs of wound deterioration refer to DN			

Figure 1. Skin care tears plan

study began. The first month (after training) the care homes continued to refer the district nursing team to obtain the baseline data on the number of patients with skin tears in the four residential areas and the number of district nurse referrals for unscheduled visits. After this first month the care home teams began to treat the patients themselves, according to the training they had received, unless the skin tears developed complications. The intervention phase took place over a 3-month period.

Educational programme

The education programme involved two specific face-to-face sessions delivered by the Tissue Viability Nursing team to each of the residential care home teams and was designed to provide them with the necessary skills and knowledge to effectively treat and manage patients with skin tears in their care. A member of the district nursing and tissue viability team were designated to be key contacts within each study site throughout the project.

The education consisted of specific modules underpinned by clinical evidence and included:

- » Anatomy and function of the skin
- » Aetiology of skin tears
- » Assessment and classification (ISTAP) and treatment of skin tears
- » Risk factors
- » Prevention and management
- » When to refer to district nursing teams.

All care staff participated in a practical session on how to treat a skin tear, application and removal of wound dressings and accurate recording of dressing changes. The education sessions were supplemented with posters which were designed to be displayed in each home to support learning.

Wound dressing stock

Skin tear first aid boxes containing TLC absorbent bordered dressings in sizes 10cm X 10cm and 13cm x 13cm, sterile dressing packs, gloves, saline and the dressings were marked with a sharpie pen used to draw an arrow on dressing showing direction of removal. Documentation was provided to each care home and training given to staff on how to complete the forms, including a trauma wound report chart and pre-written care plan. Additionally, each residential care home assigned a designated

member of staff to have responsibility for restocking and maintaining the skin tear boxes.

Participants and recruitment

The South Warwickshire Foundation Trust (SWFT) encompasses approximately 570,000 patients with a total of 78 residential care homes across the region.

There were four residential care homes purposefully selected across four geographical areas of the community by the district nursing teams to participate in the pilot study. They were selected from each different location of the trust, North, South and Rugby, for one of two reasons, either high incidence of skin tears or because they had asked to be part of the project. Staff, including different levels of residential care home staff and managers (managers, senior carers and junior carers) were educated on how to treat the skin tear from injury through to healing, as long as the wound was improving. They were also advised in what circumstances, based on assessment of the wound and the resident, when they should refer to district nursing teams to request a scheduled visit. Data collection sheets were used to record and monitor the number of residents treated in each residential care home including date of healing or the date of referral to the district nursing team for a scheduled visit.

Procedure

Selected senior carers and managers (selected locally by the residential managers) working within the four residential care teams were invited to participate in the educational programme. Participants were provided with a sheet detailing information about the education course, objectives and proposed outcomes.

The tissue viability nursing team delivered two education sessions in conjunction with a local wound care representative across the four study sites and each session lasted approximately one hour. An additional session was made available for those staff who were unable to attend the initial session.

Following the education sessions, the staff were advised on how to incorporate the education and skin tear first aid boxes into their clinical practice. The skin tear care plan also provided advice and instruction on when it was appropriate to refer

patients to district nursing teams for specialist treatment and care.

Ethics

Consent was obtained from all participants and residential care home managers involved in the project to take part in the study. As this is a service evaluation/quality improvement project that is all that would be expected.

RESULTS

Baseline audit data results

Information on location of the wound, wound duration, wound progression and whether the resident required a scheduled or unscheduled visit from the district nurses were recorded across all four study sites. The recordings were taken over a one-month period before the implementation of the educational intervention. This prospective data was obtained on the incidence, treatment and management of residents with skin tears. (Table 1)

Data from a total of 17 patients who developed skin tears over the one-month period demonstrated a total of 41.6% of these residents being referred to the district nursing teams for unscheduled visits. Out of the 17 patients, there were 7 scheduled visits with district nursing teams and 5 unscheduled a total of 12. Therefore of 58.3% of the visits were scheduled and 41.7% unscheduled.

Pilot study results

Data for the pilot study was collected over a three-month period (December–March) following the

implementation of the educational intervention. (Table 2).

Post-implementation out of a total of 58 residents who sustained a skin tear, only 4 residents 6.9% required onward referral, meaning 54 residents (93%) with skin tears were totally managed by the residential care home staff from onset through to healing without any other health professional intervention. A total of approximately 150 hours of nursing time was saved across the four locations over the 3-month period which potentially could equate to a total of 600 hours annually suggesting a significant saving in nursing time and resources.

Narratives obtained from the participants involved in the study demonstrated that they felt more confident to deal with skin tears and administer first aid to residents. Before the study participants felt they lacked the skills and knowledge to manage residents with skin tears and subsequently had an overreliance on emergency services and district nursing teams for unscheduled referrals.

“Prior to the project I would always call an ambulance if it was out of hours as I was scared to manage the wound and didn’t know what to do. Following the training I feel confident to treat the resident myself and ask for help if needed” (Care home staff member)

“Following the training the managers expressed to me that their staff felt empowered and their confidence had grown. (Tissue viability nurse).

Table 1. Data from 4 locations for one month before implementation

	Rugby	Warwick	Atherstone	Camphill
Residents with a skin tear	2	8	2	5
Scheduled visits to district nurse team	2	4	0	1
Unscheduled visits	1	4	0	0

Table 2. The three month audit data post implementation

	Total number of residents with skin tears	Number of skin tears managed totally by RCST from onset to healing	Number of referrals made to district nurse team
Rugby	16	14	2
Warwick	13	11	2
Atherstone	20	20	0
Camphill	9	9	0
Total	58	54	4

DISCUSSION

The results of this project have demonstrate that the implementation of an educational intervention can have a positive impact on the number of residents that can be managed within the residential care home setting. The implementation of a bespoke programme, designed to enhance skills and understanding regarding the management of skin tears reduced the need for referrals to district nursing teams for unscheduled visits.

The educational sessions provided enhanced knowledge and understanding about how to manage skin tears and consequently the staff described developing stronger links with the district nursing teams. This enhanced confidence ensured that patients received the correct first aid and wound dressings within an appropriate time frame. This resulted in improved wound healing for residents and positive experiences of care.

The success of this project has resulted in it being implemented across the wider geographical area throughout SWFT. It has demonstrated a reduction in the nursing time required for district nursing teams to manage residents with skin tears across the locality. The added challenge of COVID-19 pandemic meant that operational adaptations in the way the project was expanded to be introduced through online education and all remaining residential homes were given their skin tear boxes containing TLC dressings in line with ISTAP recommendations (LeBlanc et al, 2018) by the district nursing teams. Providing education to empower staff to have the confidence to manage these patients has resulted in a significant reduction in the number of district nursing and emergency care referrals, equating to substantial reductions in expenditure.

During the pandemic, managing this patient group in the residential care setting without the need to refer to other services or transfer to emergency care departments for support has significant benefits for all concerned. It helps to ensure the safety of this elderly vulnerable group of people who often have multiple comorbidities. Factors such as dementia may cause them significant psychological distress when transferring to other care settings. Physically they may also be exposed to other risks such as infection. Therefore, by maintaining residents within their own familiar home environment with competent care staff that they know ensures they

have a positive experience of care and benefit from timely and an appropriate interventions to improve clinical outcomes and ultimately reduce the burden of chronic wounds on healthcare resources. **WUK**

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